Earth Science, Part 2 (EARTH-043-300-003)

Syllabus

Course Description

Now that you know about the world you call home, Earth Science, Part 2 is your introduction to how we take care of it. This course takes a look at the resources that populate the spheres (biosphere, atmosphere, geosphere, hydrosphere, and cryosphere). It looks at how we use those resources, renew them, deplete them, and waste them. This course covers topics that help you be a good citizen of the Earth.

Prerequisites

Recommended prerequisites:

- You will need the foundation of Earth Science, Part 1 (Earth 041) or equivalent. You should already have a working knowledge of the major components of the Earth's systems.
- Pre-algebra skills will be helpful.
- You should have good reading skills; you will read some scientific data throughout this course.
- Your most important skill will be a good work ethic.

Canvas Information

If you're new to online courses, or if you just need a quick refresher, be sure to take a look at these video tutorials: Tools for Success.

Course Materials

This course has no textbook. The information you will need is included in the reading material and video resources with each lesson.

You can find Course Resources in the Getting Started module. This page includes a course glossary and video resource library.

There are some activities that require materials that you will need to supply. The materials list is on the Course Resources page. Materials are also listed on the first page of each module.

Course Learning Outcomes

In this course, we will accomplish the following:

- Study the properties of water and the effects of weathering and erosion.
- Study the effects of the rotation of the earth and its position on climate and weather.
- Study the layers of our atmosphere and weather.
- Study the carbon cycle and the nitrogen cycle.
- Study the history of the earth's climate.
- Explore the ecology of the earth and the effects of climate on life.
- Analyze the effects of humanity on our natural resources.
- Examine biodiversity and its benefits.
- Study conservation and how to control and counteract the effects of pollution.

Upon completion of this course, you should be able to do the following:

- Explain the power of water to support life and alter our earth's surface and weather.
- Explain our climate and weather both historically and currently.
- Explain ecology and the relationships between species.
- Explain how natural resources and their use affects our quality of life.

- Explain how humanity affects our natural world and how we can regulate and improve our effects upon it.

Course Organization

This course consists of two big ideas spread across 16 weeks.

At the beginning of each week, you will be provided the following information:

- the objectives to be covered during the week
- a recommended pacing guide for daily learning tasks for the week
- key vocabulary terms

To help accomplish the learning objectives and find success in the course, you should plan on doing the following:

- Review the outline for the module and make a plan to successfully complete all tasks. Make note of the learning outcome statements, the big idea, and the big question for the module.
- Read all the assigned materials, watch all embedded videos, and complete each of the self-check questions, simulated labs, and learning tasks, as applicable.
- As you read the text materials, be sure to understand the vocabulary terms. You will be asked to define these terms. Make complete descriptions and definitions. One important key to understanding science is to know the terminology well.
- Within the learning activities, there are self-check questions. These questions are designed to help you practice your skills and understanding of the material in the unit. If you find some ideas that give you difficulty, go back and review the material. Understanding these questions along with the unit quiz questions will help you do your best on the final exam.
- Complete all the assignments in the course.

Grading and Assignments

Your grade in this course will be based on these assignments and exams.

Assignment or Exam	Grading	Percent of Total Grade
Assignments & Essays	Instructor	30
Unit Quizzes	Computer	25
Final Project	Instructor	20
Final Exam*	Computer	20

*You must pass the final exam to earn credit for the course. You may retake the final exam once for a fee.

You will complete these assignments and exams during the course.

Next-Level Reflections

Next Level Reflection assignments help you formalize your thoughts about what you are learning. Completion of the NLRs counts toward your overall grade.

Discuss Knowledge Assignments

With your peers, you will participate in discussions to review concepts or create presentations about your work. In addition to creating your own posts, it is essential to respond to your classmates in a way that furthers the discussion. Your teacher will moderate all discussion board posts.

Build Knowledge Assignments

Frequently, your weekly module will require the completion of a Build Knowledge Assignment. The purpose of these activities is to build your knowledge of key vocabulary or core concepts. You will be required to record and submit your work, as these are teacher graded.

Apply Knowledge Assignments

Occasionally, you will be asked to complete a larger assignment that reinforces content information with crosscutting concepts to practice your science and engineering skills. These may span more than one weekly module and are teacher graded.

Quizzes

Each quiz consists of multiple-choice, true or false, and multiple-select questions. They will cover multiple weeks of content but are open book. These are computer graded.

Essays

You will complete a mid-term essay, allowing you to summarize concepts from the first half of the course.

Final Project

You will work on the final project starting in module 11. You will complete four individual parts of the project before preparing the project submission. The project is teacher graded.

Final Exam

The final exam is similar to the unit quizzes and includes 45 multiple-choice questions on everything covered in this course. This exam is computer graded and proctored.

You must pass the final exam to earn credit for the course; you may retake it once, for a fee, upon request. For information about resubmitting assignments and retaking the exam, please see Resubmissions and Retakes.

Final Grade

Your grade in this course will be based on these assignments and exams. Your letter grade will be calculated according to these percentages.

Grade Scale

Your letter grade is calculated according to these percentages.

Grading	Scale
A	100% – 93%
A–	92% – 90%
B+	89% – 87%
B	86% – 83%
B–	82% – 80%
C+	79% – 77%
C	76% – 73%
C–	72% – 70%
D+	69% – 67%
D	66% – 63%
D–	62% – 60%
F (fail)	59% – 0%